



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Certified Mail
Return Receipt Requested
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October 28, 2016

Adam Rogge
Director of Regulatory Compliance
Badger Creek Limited
34759 Lencioni Avenue
Bakersfield, CA 93308

SUBJECT: **Notice of Deficiency**
Underground Injection Control (UIC) Permit Application
Class I Non-Hazardous R9UIC-CA1-FY17-1
Badger Creek Limited, Bakersfield, California

Dear Mr. Rogge:

US EPA Region 9 (EPA) has received and reviewed your UIC Permit Application dated September 29, 2016. The Application was submitted for the permitting of an existing Class II State-permitted underground injection well (WD-1). This Application is for permitting WD-1 as a USEPA Class I underground injection well. Please note for future correspondence that the Permit Number for this project is **R9UIC-CA1-FY17-1**.

Based on our review, we determined that the application is administratively incomplete. As outlined below, we need additional information and clarifications in order to continue our evaluation of your application. Please submit the requested information **by December 16, 2016**. When submitting additions/corrections to the permit application, please include 3 hard copies that can be inserted into the existing binders or submit new binders with the entire permit application. Also please submit an updated electronic copy. If possible, when resubmitting the electronic copy, it would be helpful to have a linked table of contents for ease of our application review.

Note that the Vedder Formation in the Kern Front Oil Field, one of the proposed injection zones, is not a viable formation for Class I injection, based on the limited information provided (i.e., TDS level of 6,000 mg/l). While your application notes the possibility that the state will submit a Class II-related aquifer exemption request to EPA for the Vedder in the Kern Front field, that request has not been made at this time. More generally, a formation exempted for Class II-related injection may or may not be a viable injection zone for Class I injection. During our technical review, we will need to explore and understand this situation more fully.

Comments Regarding Attachments

- **Attachment Q – Plugging and Abandonment Plan:** The Proposed Abandonment Program must be revised and cost estimates for the Plugging and Abandonment provided. Note that EPA

Region 9 does not allow for mud plugging of zones for well abandonment. We require that the lower perforated zones be cement squeezed for at least 100' above the top of the perforations and the casing filled with neat cement between the squeezed intervals to within 5' of the surface. For well WD-1, please revise the method and costs for this abandonment.

- **ATTACHMENT R - FINANCIAL ASSURANCE:** The Financial Assurance information provided is not adequate. In Attachment R there is reference to costs totaling \$160,000 for plugging and abandoning well WD-1. Please revise and resubmit your cost estimate based on our required P&A procedures. EPA Region 9 requires financial assurance in an amount that considers the estimated costs of an independent third-party contractor to perform the abandonment, along with a contingency factor to account for various uncertainties in the event that EPA is required to P&A the well. A typical Class I UIC contingency factor is three, thus, for existing well WD-1 the amount of financial assurance required will be 3 times the revised abandonment proposal amount. Submit your Financial Assurance information and surety bond to reflect this revised amount required for P&A of well WD-1.
- Additionally, please provide information regarding the Corporate Structure of Badger Creek Limited, including officers of the Corporation and information regarding signature authority within the organization.

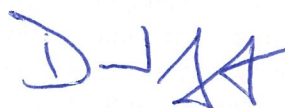
Considerations of Federal Law

40 CFR §144.4 requires that EPA consider the potential applicability of several specific Federal Laws, including the Wild and Scenic Rivers Act (WSRA), National Historic Preservation Act (NHPA), Endangered Species Act (ESA), Coastal Zone Management Act (CZMA), and the Fish and Wildlife Conservation Act (FWCA). To expedite our consideration of these laws, please describe how you will satisfy applicable requirements under those Federal Laws as they pertain to this permit application.

Once we receive all of the above requested information, the permit application will be considered administratively complete, and our technical review of the application will continue. Please note that additional technical information may also be required as the technical review proceeds.

If you have any questions about this letter or the UIC application, please contact me at (415) 972-3971 or Joel Coffman at (415) 972-3530.

Sincerely,



David Albright
Manager, Drinking Water Protection Section

cc: Alan Walker, CA DOGGR
Bill Bartling, CA DOGGR, Inland District
Clay Rodgers, Central Valley Regional Water Quality Control Board